Attorney Dock t No. D/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/728,756

Filed: 12/04/2000 Group: 2873

Applicant: Richard F. Bergen Examiner: A. M. Harrington

Title: LIGHT ALTERING DEVICE

CERTIFICATE OF TRANSMISSION
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

11/03/03
(Date of Deposit)

William A. Henry, II
(Signature)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

AFFIDAVIT UNDER Rule 131

I, Richard F. Bergen, being duly sworn, depose and state:

1. I am the Applicant of the above-identified patent application and inventor of the subject matter described and claimed therein.

2. Prior to October 4, 2000, I completed the invention as claimed in the subject application in this country, as evidenced by the following:

   a) As evidenced by Exhibit A, which is notebook page 1 from my Laboratory Notebook, Prior to October 4, 2000, I conceived and with due diligence reduced to practice a capillary array of tubes held together in a circle by a rubber band and applied a laser beam to the array directed at its side and a circular beam of light emerged.

b) Prior to October 4, 2000, as shown in Exhibit B and page 3 from my laboratory Notebook, I ran a test to determine the light efficiency for a bundle of 16 capillary tubes set up as described in Exihibit A.

3. Each of the dates deleted from Exhibits A and B is prior to October 4, 2000.

Richard F. Bergen

Richard F. Bergen

State of New York)

)

County of Wayne) ss.:

Sworn to me and subscribed before me this 30th day of October, 2003

Elizabeth A. Wisecup

Notary Public

ELIZABETH A. WISECUP
Notary Public in the State of New York
Qualified in Wayne County
Commission Expires May 4, 2006

EXHIBIT A

This invention proposes another configuration to change a beam of energy - e.g. Laser, UV., IR, etc, into a circular, or near circular radiation pattern. In past experiments, a collimated laser beam has been directed at a fiber optic rod. In normal usage an image at one end of the rod, is relayed to the opposite end of the rod. This invention ~~proposes~~ discloses a laser beam directed into the side of the rod. Due to the refraction of index differences between the fibers and cladding, and other possible layers, the laser beam emerges as a circle of light from the rod.

These results led to experiments employing hollow glass capillary tubes ~2 mm in diameter, surrounded by air spaces between the tubes. These tubes were held by a rubber band to form a circular (or near circular pattern). A laser beam directed into the sides of the capillary tubes resulted in a circular beam of light emerging.

An additional method employs many individual optical fibers bound in a round shape (with tape). When illuminated from the side, they too produce an emerging circle of light.

An explanation of these tests has been disclosed and understood by the Witnesses listed below.

Inventor DATE WITNESSES DATE

RICHARD F. BERGER Elsie Horning

SIGNATURE Richard F Berger Elsie Horning

Dewey Horning

Clem Hornung

EXHIBIT B